

Title (en)  
POLYURETHANE COATINGS AND ADHESIVES CONTAINING MONOHYDROXYLATED DIENE POLYMERS AND EPOXIDIZED DERIVATIVES THEREOF

Title (de)  
MONOHYDROXY-DIEN-POLYMERE SOWIE DEREN EPOXIDIERTE DERIVATE ENTHALTENDE POLYURETHAN-BESCHICHTUNGEN UND KLEBSTOFFE

Title (fr)  
REVETEMENTS ET ADHESIFS POLYURETHANNES CONTENANT DES POLYMERES DE DIENES MONOHYDROXYLES AINSI QUE DES DERIVES EPOXYDES DE CEUX-CI

Publication  
**EP 0785960 B1 19990113 (EN)**

Application  
**EP 95935442 A 19951009**

Priority  
• EP 9504014 W 19951009  
• US 32080294 A 19941011

Abstract (en)  
[origin: US5459200A] The invention herein relates to polyurethane coating and adhesive compositions containing partially unsaturated monohydroxylated polydiene polymers which are comprised of at least two polymerizable ethylenically unsaturated monomers wherein at least one is a diene monomer which yields unsaturation suitable for epoxidation. The invention preferably encompasses the use of epoxidized derivatives of these novel partially unsaturated monohydroxylated polydiene polymers and epoxidized derivatives of unsaturated monohydroxylated polydiene polymers in such mating and adhesive compositions. The preferred monohydroxylated polydiene polymer of the present invention has a structural formula: (HO)x-A-Sz-B-(OH)y (I) wherein A and B are polymer blocks which may be homopolymer blocks of conjugated diolefin monomers, copolymer blocks of conjugated diolefin monomers, or copolymer blocks of diolefin monomers and monoalkenyl aromatic hydrocarbon monomers. The A blocks have a molecular weight of from 100 to 6000, preferably 100 to 3,000, and most preferably 500 to 2000, and the B blocks have a molecular weight of from 1000 to 15,000, preferably 3000 to 7000, and most preferably 2000 to 6000. S is a vinyl aromatic hydrocarbon block which may have a molecular weight of from 500 to 10,000. x and y are 0 or 1 and either x or y must be 1 but only one at a time can be 1. z is 0 or 1. These polymers are preferably epoxidized such that they contain from 0.5 to 7.0 milliequivalents (meq) of epoxy per gram of polymer.

IPC 1-7  
**C08G 18/67**; **C08G 18/28**; **C09D 175/16**; **C09J 175/16**; **C09D 175/04**; **C09J 175/04**

IPC 8 full level  
**C08F 297/02** (2006.01); **C08G 18/28** (2006.01); **C08G 18/67** (2006.01); **C08G 18/69** (2006.01); **C09D 153/00** (2006.01); **C09D 175/14** (2006.01); **C09J 153/00** (2006.01); **C09J 175/14** (2006.01)

CPC (source: EP KR US)  
**C08G 18/28** (2013.01 - KR); **C08G 18/2815** (2013.01 - EP US); **C08G 18/67** (2013.01 - KR); **C08G 18/671** (2013.01 - EP US); **C08G 18/69** (2013.01 - EP US); **C09D 175/16** (2013.01 - KR); **C09J 175/16** (2013.01 - KR)

Cited by  
DE102006003170A1

Designated contracting state (EPC)  
BE DE ES FR GB IT NL SE

DOCDB simple family (publication)  
**US 5459200 A 19951017**; BR 9509290 A 19980707; CN 1160408 A 19970924; DE 69507320 D1 19990225; DE 69507320 T2 19990624; EP 0785960 A1 19970730; EP 0785960 B1 19990113; ES 2126325 T3 19990316; JP H10506948 A 19980707; KR 970706327 A 19971103; MX 9702587 A 19970731; TR 199501234 A2 19960621; TW 294701 B 19970101; WO 9611220 A1 19960418; ZA 958492 B 19960509

DOCDB simple family (application)  
**US 32080294 A 19941011**; BR 9509290 A 19951009; CN 95195582 A 19951009; DE 69507320 T 19951009; EP 9504014 W 19951009; EP 95935442 A 19951009; ES 95935442 T 19951009; JP 51234496 A 19951009; KR 19970702337 A 19970410; MX 9702587 A 19951009; TR 9501234 A 19951010; TW 84111531 A 19951101; ZA 958492 A 19951009